AMENDMENTS TO THE CLAIMS

Please rewrite the slate of claims as follows:

1(currently amended):   A implantable and programmable

medical device comprising:

a.   [[A]] a processing and control unit for

regulating the delivery of treatment to a patient in accordance

with a plurality of programmable parameters, said processing and

control unit having (1) memory in which a password and

programmable parameters are stored, (2) a first mode of

operation in which a first set of said programmable parameters

stored in memory can be changed, and (3) a second mode of

operation in which at least one of said first set of said

programmable parameters cannot be changed; and

b.   [[An]] an external programmer for transmitting

passwords and programming signals to said processing and control

unit such that if a password transmitted by the eternal external

programmer matches the password stored in the memory of the

processing and control unit, the processing and control unit

will switch to said first mode of operation so that the

programming signals can be used to change any of the first set

of programmable parameters stored in memory.

2(original):   The programmable medical device of claim 1

wherein said processing and control unit has a third mode of

2

operation in which said password and a serial number can be set and stored in said memory.

3 (original): The programmable medical device of claim 2 wherein said external programmer can interrogate the memory of the processing and control unit to determine and record said password when the processing and control unit is in either said first or third modes of operation, but not while said processing and control unit is in said second mode of operation.

4 (original): The programmable medical device of claim 2 further comprising a remote computer in which the password and serial number are stored for future reference.

5 (canceled).

6 (original): The programmable medical device of claim 1 wherein said password, once stored in memory, cannot be changed in either said first or said second modes of operation.

7 (original): The programmable medical device of claim 6 wherein said password is set at the factory during manufacture of the device.

8 (currently amended): The programmable medical device of claim 5 1 and further comprising media on which said password is recorded, said media capable of being carried by a patient being treated with said implantable medical device.

9 (currently amended): The programmable medical device of claim 8 wherein said media is comprises an identification card.

3

10(original): The programmable medical device of claim 1 wherein said processing and control unit will not switch to said first mode of operation for a predetermined period of time if said external programmer transmits a predetermined number of passwords that do not match the password stored in the memory of the processing and control unit.

11(original): The programmable medical device of claim 1 further including an alarm which will be activated if the external programmer transmits a predetermined number of passwords that do not match the password stored in the memory of the processing and control unit.

12(original): The programmable medical device of claim 11 when said alarm is audible.

13(original): The programmable medical device of claim 11 wherein said alarm is visual.

14(currently amended): A programmable medical device comprising:

a. a processing and control unit for regulating the delivery of treatment to a patient in accordance with a plurality of programmable parameters, said processing and control unit having (1) a first mode of operation in which a serial number and password can be entered and stored in its memory, (2) a second mode of operation in which a first set of operating parameters can be entered and stored in its memory,

4

and (3) a third mode of operation in which at least one of said first set of operating parameters cannot be altered;

b.   an external programmer for transmitting passwords and programming signals to said processing control unit such that if a password transmitted by the ~~eternal~~ external programmer matches the password stored in the memory of the processing and control unit, the processing and control unit will switch to said second mode of operation so that the programming signals can be used to change ~~the~~ any of the first set of operating parameters stored in the memory of the processing and control unit, the external programmer automatically reading and storing the serial number and password of the processing and control unit if said processing and control unit is in said second mode of operation.

15(original): The programmable medical device of claim 14 wherein said external programmer automatically reads and stores the serial number and password of the processing and control unit if said processing and control unit is in said first mode of operation.

16(canceled).

17(original): The programmable medical device of claim 14 wherein said external programmer cannot read and store the serial number and password of the processing and control unit if

5

said processing and control unit is in said third mode of operation.

18(currently amended): ~~The programmable device of claim 14 further comprising~~ A programmable medical device comprising:

 a. a processing and control unit for regulating the delivery of treatment to a patient in accordance with a plurality of programmable parameters, said processing and control unit having (1) a first mode of operation in which a serial number and password can be entered and stored in its memory, (2) a second mode of operation in which a first set of operating parameters can be entered and stored in its memory, and (3) a third mode of operation in which at least one of said first set of operating parameters cannot be altered;

 b. an external programmer for transmitting passwords and programming signals to said processing control unit such that if a password transmitted by the external programmer matches the password stored in the memory of the processing and control unit, the processing and control unit will switch to said second mode of operation so that the programming signals can be used to change any of the first set of operating parameters stored in the memory of the processing and control unit, external programmer reads the serial number of the processing and control unit, interrogates the remote storage/computer to determine the serial number of the

6

processing and control unit and transmits the password to the

processing and control unit to switch the processing and control

unit from the third mode of operation to the second mode of

operation for reprogramming; and

        c.   a remote computer in which the password and

serial number are stored for future reference.

     19(canceled).

     20(original):   The programmable medical device of claim 14

wherein, when said processing and control unit is in said second

mode of operation the external programmer can be used to change

the parameters of said first set of operating parameters which

can be altered when said processing and control unit is in said

third mode of operation.

     21(original):   The programmable medical device of claim 14

wherein said processing and control unit will automatically

switch from said second mode of operation to said third mode of

operation after a predetermined period of time if no programming

signals are received from the external programmer.

     22(original):   The programmable medical device of claim 14

wherein said external programmer can be controlled from a remote

computer.

     23(currently amended):   The programmable medical device of

claim 22 wherein said external programmer is connected to said

remote computer via a network ~~the Internet~~.

24(original): A programmable medical device comprising:

a. processing and control means for regulating the delivery of treatment to a patient in accordance with a plurality of programmable parameters, said processing and control means having (1) memory in which a password and programmable parameters are stored, (2) a first mode of operation in which a first set of said programmable parameters stored in memory can be changed, and (3) a second mode of operation in which at least one of said first set of said programmable parameters cannot be changed; and

b. external programming means for transmitting passwords and programming signals to said processing control unit such that if a password transmitted by the eternal programming means matches the password stored in the memory of the processing and control means, the processing and control means will switch to said first mode of operation so that the programming signals can be used to change any of the first set of programmable parameters stored in memory.

25(original): The programmable medical device of claim 1 wherein said processing and control means has a third mode of operation in which said password and a serial number can be set and stored in memory.

26(original): The programmable medical device of claim 2 wherein said external programming means can interrogate the

8

memory of the processing and control means to determine and record said password when the processing and control means is in either said first or third modes of operation, but not while said processing and control means is in said second mode of operation.

27(original): The programmable medical device of claim 2 further comprising a remote storage and computing means for storing the password and serial numbers of said processing and control means for future reference.

28(original): A programmable medical device comprising:

a. processing and control means for regulating the delivery of treatment to a patient in accordance with a plurality of programmable parameters, said processing and control means having (1) a first mode of operation in which a serial number and password can be entered and stored in its memory, (2) a second mode of operation in which a first set of operating parameters can be entered and stored in its memory, and (3) a third mode of operation in which at least one of said first set of operating parameters cannot be altered;

b. external programming means for transmitting passwords and programming signals to said processing and control means such that if a password transmitted by the eternal programming means matches the password stored in the memory of the processing and control means, the processing and control

means will switch to said second mode of operation so that the programming signals can be used to change the any of the first set of operating parameters stored in the memory of the processing and control means.

29(canceled).

30(canceled).

31(canceled).

32(original): The programmable medical device of claim 14 further comprising a remote storage and computing means in which the password and serial number are stored for future reference.

33(original): The programmable medical device of claim 18 wherein said external programming means reads the serial number of the processing and control means, interrogates the remote storage and computing means to determine the serial number of the processing and control means, and transmits the password to the processing and control means to switch the processing and control means from the third mode of operation to the second mode of operation for reprogramming.

34(original): The programmable medical device of claim 14 wherein when said processing and control means is in said second mode of operation the external programming means can be used to change the parameters of said first set of operating parameters which can be altered when said processing and control means is in said third mode of operation.

10

35(currently amended):   The programmable medical device of claim [[14]] 18 wherein said processing and control means will automatically switch from said second mode of operation to said third mode of operation after a predetermined period of time if no programming signals are received from the external programming means.

36(currently amended):   The programmable medical device of claim [[14]] 18 wherein said external programmer ~~programming~~ ~~means~~ can be controlled from a remote computer.

37(canceled).

38(original):   A method for protecting a programmable medical device from unauthorized programming, said method comprising:

a. providing a processing and control unit that controls the operation of the medical device, said processing and control unit having memory for storing a password and operating parameters, said processing and control unit having at least a first mode of operation in which all of a first set of operating parameters can be altered and a second mode of operation in which less than all of said first set of operation parameters can be altered, said password being used to control the entry of the processing and control unit into the first mode of operation;

b. providing an external programmer capable of transmitting passwords and programming signals to said processing and control unit;

c. using the external programmer to send a password to the processing and control unit which compares the password sent to the password stored in its memory, and enters the first mode of operation only if the password stored in memory and the password transmitted match;

d. if the processing and control unit is in the first mode of operation, using the external programmer to alter at least one of the first set of parameters.

39(original): The method of claim 38 further comprising the step of interrogating a remote computer to determine the password that the external programmer sends to the processing unit.

40(original): The method of claim 39 further comprising the step of using a remote computer to control the operation of the programmer.

41(original): The method of claim 39 wherein said remote computer communicates with the external programmer via a network ~~the Internet~~.

42(currently amended): The method of claim 41 wherein the remote computer must transmit the correct password in order to control the external programmer and use it to alter operating

parameters stored in the memory of the processing and control unit.

43 (canceled).

44 (canceled).

45 (original): A programmable medical device comprising a processing and control unit for regulating the delivery of treatment to a patient in accordance with a plurality of programmable parameters, said processing and control unit having a password assigned to it so that at least some of the programmable parameters can only be altered in response to programming signals from an external programmer if the processing and control unit first receives from the external programmer a password corresponding to the password assigned to the processing and control unit.

46 (original): The programmable medical device of claim 45 further comprising an external programmer having means for comparing a password assigned to the external programmer with a password entered into the external programmer so that at least some programming signals will not be transmitted by the external programmer to the processing and control unit if the password assigned to the external programmer does not match the password entered into the external programmer.

47 (original): The programmable medical device of claim 45 wherein said programmable medical device is implantable.

48 (original): The programmable medical device of claim 45 wherein said password assigned to the processing and control unit, once stored in memory, cannot be changed.

49 (original): The programmable medical device of claim 48 wherein said password is set at the factory during manufacture of the device.

50 (original): The programmable medical device of claim 45 further comprising media on which said password assigned to the processing and control unit is recorded, said media capable of being carried by a patient being treated with said implantable medical device.

51 (original): The programmable medical device of claim 50 wherein said media is an identification card.

52 (original): The programmable medical device of claim 45 wherein said processing and control unit will not permit programmable parameters to be altered for a predetermined period of time if the processing and control unit receives from an external programmer a predetermined number of passwords that do not match the password assigned to the processing and control unit.

53 (original): The programmable medical device of claim 45 further including an alarm which will be activated if the processing and control unit receives a predetermined number of

14

passwords that do not match the password assigned to the

processing and control unit.

54(original): The programmable medical device of claim 53

wherein said alarm is audible.

55(original): The programmable medical device of claim 53

wherein said alarm is visual.